



AMCAL
INDUSTRIAL PUMP SOLUTIONS

GRUNDFOS 
DATA BOOKLET

LC 231, LC 241

50/60 Hz



GRUNDFOS 

1. Product introduction	3
Applications	3
Features	3
2. Product data	4
Type key for LC 231	4
Type key for LC 241	4
Type key for CU 241	4
Product range, single pump unit	5
Product range, dual pump unit	6
3. Construction	8
Control unit, LC 231	8
Control cabinet, LC 241	8
CU 241	8
IO 242	8
4. Functions	9
Operating panel	9
Description of selected functions	9
5. Installation	10
Mechanical installation	10
Electrical installation	10
6. Technical data for LC 231	11
Inputs and outputs	11
Dimensions	11
Operating conditions	11
7. Technical data for LC 241	12
Inputs and outputs	12
Dimensions	12
Operating conditions	12
8. Optional equipment for LC 24X	13
9. Accessories	15
Grundfos GO Remote	15
Additional accessories	15
10. Grundfos Product Center	18
11. Document quality feedback	19

Product introduction

The level-control unit is designed to control one or two pumps. It can be used in emptying and filling applications such as small commercial buildings, wastewater transport and tank-filling. The control unit switches the pump on and off according to the liquid level measured by level switches or a pressure sensor. When the start level is reached, the pump starts, and when the liquid level has been lowered to the stop level, the pump is stopped by the control unit. An alarm is indicated in case of, for example, high-water level in the tank or sensor failure. The control unit is available in two variants.

- LC 231 provides a compact solution with integrated motor protection.
- LC 241 is a cabinet solution allowing you to customise your setup.

Basic settings are configured via the operating panel and advanced settings are configured with Grundfos GO Remote.

The control unit can be fitted with a range of Grundfos communication modules to gain access to monitoring systems such as SCADA.

Applications

The product can be used for the following applications:

- network pumping stations
- main pumping stations
- commercial buildings
- municipal systems
- tank-filling applications.

Features

The main features for the control unit are the following:

- support of up to two pumps
- manual and automatic control of the pump
- advanced settings with Grundfos GO Remote via Bluetooth
- operating indication, such as pump running and actual water level
- alarm and warning indication, such as power phase missing and high-water level
- motor and phase failure protection
- setting of stop delays matching the actual operating conditions
- antiseizing to prevent pump blockage
- automatic alternation of pumps in a dual pump setup.

Product data

Type key for LC 231

Example	LC 231	2x	1-9	DOL	PI
Pos.	1	2	3	4	5

Pos.	Description
1	Type: • LC 231: wall-mounted version
2	Number of pumps supported
3	Current range of pump [A]
4	Starting method: • DOL: direct-on-line
5	Panel type: • PI: Plastic enclosure

Type key for LC 241

Example	LC 241	2x	9-26	DOL	30	150	1 × 230	PI	OPT
Pos.	1	2	3	4	5	6	7	8	9

Pos.	Description
1	Type: • LC 241: panel version
2	Number of pumps supported
3	Current range of pumps [A]
4	Starting method: • DOL: direct-on-line • SD: star-delta • SST: soft starter
5	Operating capacitor [μF]
6	Starting capacitor [μF]
7	Supply voltage [V]
8	Panel type: • MI: Metal
9	OPT: Options. • BB: battery backup • CT: Current transformer • D: Fault light system • E: Main switch • F: Circuit breaker per pump • H: ON/OFF/AUTO switch • I: RCD panel • J: RCD per pump • K: Ex barrier analog 4-20 mA • L: Ex barrier digital • M: IO 241 • N: DIN-mount electrode relay for two electrodes and REF (CLD4MA2DM24)

Type key for CU 241

Example	CU 241	1
Pos.	1	2

Pos.	Description
1	Type • CU 241
2	Number of pumps supported

Product range, single pump unit

1 × 230, 50/60 Hz, N, PE

Controller type	Rated current [A]	Starting method	Start/run capacitor [μF]	Cabinet material	Option	Product number
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: CT	99877141
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: CT	99877153
LC 241	5.7 - 12	DOL	-	Plastic	OPT: CT	99877167
LC 241	5.7 - 12	DOL	- / 30	Plastic	OPT: CT	99877169
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: CT	99877171
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: E	99897032
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: E	99897043
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: E	99897048
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: E, F	99897056
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: E, F	99897057
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: E, F	99897062

3 × 230/400, 50/60 Hz, N, PE

Controller type	Rated current [A]	Starting method	Cabinet material	Option	Product number
LC 241	0.8 - 2.7	DOL	Plastic	OPT: CT	99877119
LC 241	1.9 - 6.3	DOL	Plastic	OPT: CT	99877139
LC 241	5.7 - 12	DOL	Plastic	OPT: CT	99877164
LC 241	9 - 26	DOL	Plastic	OPT: CT	99877183
LC 241	10 - 30	SD	Metal	OPT: CT	99877189
LC 241	16 - 44	SD	Metal	OPT: CT	99877199
LC 241	8 - 12	SST	Metal	OPT: CT	99877211
LC 241	10 - 16	SST	Metal	OPT: CT	99877217
LC 241	16 - 20	SST	Metal	OPT: CT	99877223
LC 241	20 - 25	SST	Metal	OPT: CT	99877229
LC 241	25 - 30	SST	Metal	OPT: CT	99877235
LC 241	30 - 42	SST	Metal	OPT: CT	99877241
LC 241	0.8 - 2.7	DOL	Plastic	OPT: E	99897029
LC 241	1.9 - 6.3	DOL	Plastic	OPT: E	99897031
LC 241	5.7 - 12	DOL	Plastic	OPT: E	99897047
LC 241	9 - 26	DOL	Plastic	OPT: E	99897051
LC 241	0.8 - 2.7	DOL	Plastic	OPT: E, F	99897053
LC 241	1.9 - 6.3	DOL	Plastic	OPT: E, F	99897055
LC 241	5.7 - 12	DOL	Plastic	OPT: E, F	99897061
LC 241	9 - 26	DOL	Plastic	OPT: E, F	99897065
LC 241	10 - 30	SD	Metal	OPT: E	99897067
LC 241	16 - 44	SD	Metal	OPT: E	99897069
LC 241	10 - 30	SD	Metal	OPT: E, F	99897073
LC 241	16 - 44	SD	Metal	OPT: E, F	99897075
LC 241	8 - 12	SST	Metal	OPT: E	99897079
LC 241	10 - 16	SST	Metal	OPT: E	99897081
LC 241	16 - 20	SST	Metal	OPT: E	99897083
LC 241	20 - 25	SST	Metal	OPT: E	99897085
LC 241	25 - 30	SST	Metal	OPT: E	99897087
LC 241	30 - 42	SST	Metal	OPT: E	99897089

3 × 400, 50/60 Hz, PE

Controller type	Rated current [A]	Starting method	Cabinet material	Option	Product number
LC 241	0.8 - 2.7	DOL	Plastic	OPT: CT	99877133
LC 241	1.9 - 6.3	DOL	Plastic	OPT: CT	99877155
LC 241	5.7 - 12	DOL	Plastic	OPT: CT	99877173
LC 241	9 - 26	DOL	Plastic	OPT: CT	99877185
LC 241	10 - 30	SD	Metal	OPT: CT	99877191
LC 241	16 - 44	SD	Metal	OPT: CT	99877201
LC 241	8 - 12	SST	Metal	OPT: CT	99877213
LC 241	10 - 16	SST	Metal	OPT: CT	99877219
LC 241	16 - 20	SST	Metal	OPT: CT	99877225
LC 241	20 - 25	SST	Metal	OPT: CT	99877231
LC 241	25 - 30	SST	Metal	OPT: CT	99877237
LC 241	30 - 42	SST	Metal	OPT: CT	99877243

3 × 460, 50/60 Hz

Controller type	Rated current [A]	Starting method	Cabinet material	Variant	Product number
LC 231	1 - 12	DOL	Plastic	EU	99369644
LC 231	1 - 9.6	DOL	Plastic	US	99369651

Product range, dual pump unit**1 × 230, 50/60 Hz, N, PE**

Controller type	Rated current [A]	Starting method	Start/run capacitor [μF]	Cabinet material	Option	Product number
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: CT	99877159
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: CT	99877161
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: E	99897045
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: E	99897046
LC 241	1.9 - 6.3	DOL	-	Plastic	OPT: E, F	99897059
LC 241	1.9 - 6.3	DOL	150 / 30	Plastic	OPT: E, F	99897060
LC 241	5.7 - 12	DOL	-	Plastic	OPT: CT	99877176
LC 241	5.7 - 12	DOL	- / 30	Plastic	OPT: CT	99877178
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: CT	99877180
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: E	99897050
LC 241	5.7 - 12	DOL	150 / 30	Plastic	OPT: E, F	99897064

3 × 230/400, 50/60 Hz, N, PE

Controller type	Rated current [A]	Starting method	Cabinet material	Option	Product number
LC 241	0.8 - 2.7	DOL	Plastic	OPT: CT	99877134
LC 241	1.9 - 6.3	DOL	Plastic	OPT: CT	99877156
LC 241	5.7 - 12	DOL	Plastic	OPT: CT	99877174
LC 241	9 - 26	DOL	Plastic	OPT: CT	99877186
LC 241	10 - 30	SD	Metal	OPT: CT	99877192
LC 241	16 - 44	SD	Metal	OPT: CT	99877202
LC 241	8 - 12	SST	Metal	OPT: CT	99877214
LC 241	10 - 16	SST	Metal	OPT: CT	99877220
LC 241	16 - 20	SST	Metal	OPT: CT	99877226
LC 241	20 - 25	SST	Metal	OPT: CT	99877232
LC 241	25 - 30	SST	Metal	OPT: CT	99877238
LC 241	30 - 42	SST	Metal	OPT: CT	99877244
LC 241	0.8 - 2.7	DOL	Plastic	OPT: E	99897030

Controller type	Rated current [A]	Starting method	Cabinet material	Option	Product number
LC 241	1.9 - 6.3	DOL	Plastic	OPT: E	99897044
LC 241	5.7 - 16	DOL	Plastic	OPT: E	99897049
LC 241	9 - 26	DOL	Plastic	OPT: E	99897052
LC 241	0.8 - 2.7	DOL	Plastic	OPT: E, F	99897054
LC 241	1.9 - 6.3	DOL	Plastic	OPT: E, F	99897058
LC 241	5.7 - 12	DOL	Plastic	OPT: E, F	99897063
LC 241	9 - 26	DOL	Metal	OPT: E, F	99897066
LC 241	10 - 30	SD	Metal	OPT: E	99897068
LC 241	16 - 44	SD	Metal	OPT: E	99897070
LC 241	10 - 30	SD	Metal	OPT: E, F	99897074
LC 241	16 - 44	SD	Metal	OPT: E, F	99897076
LC 241	8 - 12	SST	Metal	OPT: E	99897080
LC 241	10 - 16	SST	Metal	OPT: E	99897082
LC 241	16 - 20	SST	Metal	OPT: E	99897084
LC 241	20 - 25	SST	Metal	OPT: E	99897086
LC 241	25 - 30	SST	Metal	OPT: E	99897088
LC 241	30 - 42	SST	Metal	OPT: E	99897090

3 × 400, 50/60 Hz, P

Controller type	Rated current [A]	Starting method	Cabinet material	Option	Product number
LC 241	0.8 - 2.7	DOL	Plastic	OPT: CT	99877138
LC 241	1.9 - 6.3	DOL	Plastic	OPT: CT	99877163
LC 241	5.7 - 12	DOL	Plastic	OPT: CT	99877182
LC 241	9 - 26	DOL	Plastic	OPT: CT	99877188
LC 241	10 - 30	SD	Metal	OPT: CT	99877198
LC 241	16 - 44	SD	Metal	OPT: CT	99877204
LC 241	8 - 12	SST	Metal	OPT: CT	99877216
LC 241	10 - 16	SST	Metal	OPT: CT	99877222
LC 241	16 - 20	SST	Metal	OPT: CT	99877228
LC 241	20 - 25	SST	Metal	OPT: CT	99877234
LC 241	25 - 30	SST	Metal	OPT: CT	99877240
LC 241	30 - 42	SST	Metal	OPT: CT	99877246

3 × 460, 50/60 Hz

Controller type	Rated current [A]	Starting method	Cabinet material	Variant	Product number
LC 231	1 - 9	DOL	Plastic	EU	99369650
LC 231	1 - 7.6	DOL	Plastic	US	99369652

Construction

Control unit, LC 231

LC 231 is a compact solution with certified motor protection and current measurement.

It is available in two versions:

- single pump
- dual pump.



Single pump version



Dual pump version

Control cabinet, LC 241

LC 241 is a cabinet solution, and it can be customised to meet specific demands. It offers motor protection via an electronic DIN rail.

It is available in two versions:

- single pump
- dual pump.



Single pump version



Dual pump version

CU 241

The level-control unit switches the pump on and off according to the liquid level measured by level switches or a pressure sensor. When the start level is reached, the pump starts, and when the liquid level has been lowered to the stop level, the pump is stopped by the control unit. An alarm is indicated if for example the water level is too high in the tank or the sensor fails.



Single pump version



Dual pump version

Model	Product number
Single pump	99347490
Dual pump	99347488

IO 242

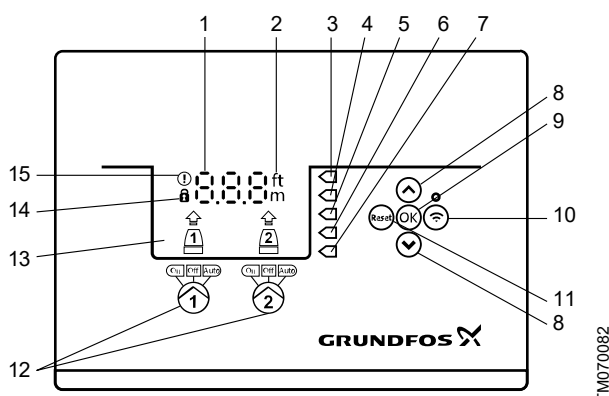
The IO 242 pump module is used together with other Grundfos controllers and modules, for example Grundfos CU 24X. The pump module provides analog and digital input signals for CU 24X. It also provides digital outputs used for external switch gear. When combined with a CU 24X control unit, it is possible to control one or two pumps, monitor the running conditions of the pumps and enable all connections to the sensors in pump motors or in the pit or tank.



Model	Product number
Pump module	99369842

Functions

Operating panel



The operating panel enables manual setting and monitoring of the system. This display is intuitive and you are guided step-by-step by the startup wizard during the first setup.

The display is available in a single pump version and a dual pump version.

Pos.	Description
1	Display
2	Units
3	High level
4	Start level, pump 2, if available
5	Start level
6	Stop level, pump 1 and pump 2, if available
7	Dry-running level
8	Up/Down buttons: Press these buttons to navigate between submenus or change the value settings.
9	OK button: Press this button to save changed values.
10	Connect button: Press this button to connect the control unit to Grundfos GO Remote via Bluetooth.
11	Reset button: Press this button during startup to reset settings and start over or to reset an alarm or warning.
12	Operating mode for the pump: - On: The pump has been switched on manually. - Off: The pump has been switched off manually. - Auto: The pump is running automatically based on settings.
13	Display. It shows the pump status.
14	Lock symbol. If the symbol is lit, the control unit is locked from making changes.
15	Alarm and warning symbol: - Red: alarm - Yellow: warning.

Description of selected functions

Grundfos GO Remote support

With Grundfos GO Remote, you can monitor the product, change settings, collect data and make reports. A user-friendly interface provides you with all the information and help you need, as well as live pump data monitoring and easy-to-follow tips and guides.

You can use Grundfos GO Remote for the following functions:

- reading operating data
- reading warning and alarm indicators
- setting the control mode and the application (emptying or filling)
- setting the time (real-time clock)
- storing and recalling configuration.

Alarm and warning logs

The control unit can remember up to 20 alarms and warnings. The operating panel shows the alarm or warning code in the display. Using Grundfos GO Remote, you can see the alarm or warning including a short text describing the error.

Pump alternation

The control unit supports pump alternation which allows two pumps to start and stop alternately. The pump with the lowest number of running hours is always started first. The function ensures that the running hours of the pumps are the same. It is possible to set a time delay before the next pump is started.

Security settings

The control unit can be protected from unauthorised use. You can lock the operating panel so that it cannot be operated by others. You can also set PIN-code protection on Grundfos GO Remote.

Delays

The control unit supports a stop delay function. A stop delay is the time between the stop level being reached and the pump stopping. The function prevents the pump from starting and stopping too frequently and reduces water hammer in long pipes.

The control unit also supports another delay. The after-run delay, high level, is a delay that keeps the pump running after the high-level float switch is deactivated. If the analog level sensor is defective, the water level in the pit or tank is only controlled by the high-level float switch. To avoid too many starts and stops, the delay should be set to a time that allows the pump to drain the pit or tank to a degree without reaching the dry-run level.

Motor protection

The product incorporates current- and temperature-dependent motor protection. If the pump runs without water, becomes blocked or otherwise overloaded, it cuts out. When the motor has cooled sufficiently, it restarts automatically.

- For overheating, the control unit offers thermal protection for the connected motors. Two types of thermal-protection sensors can be connected to the control unit: a PTC sensor (analog) and a thermal switch (digital).
- For motor overload, LC 23X is protected by internal software-based motor protection. LC 24X is protected by an electronic motor-protection relay.

Installation

Mechanical installation

Location

Install the product in a location that meets the following requirements:

- Place the product in a flood-safe place.
- Make sure that the ambient temperature is within the limits.
- Install the product as close as possible to the connected pumps, sensors, and accessories.
- The product must be protected from direct sunlight.
- The product must be easily accessible.
- We recommend that you install the product in a protective shed or enclosure to avoid direct sunlight and rain.

Electrical installation

The electrical connection and protection must be carried out in accordance with local regulations. Also observe the following requirements:

- Ensure that the product is suitable for the power supply to which it is to be connected.
- The power cables and pump cables must be connected correctly according to the relevant electrical diagram.
- The product must always be earthed correctly.
- The PTC and moisture sensors are connected correctly.
- I_{nom} and I_{start} match the panel.
- For LC 231, use standard version pumps only. Sensor versions are not possible.

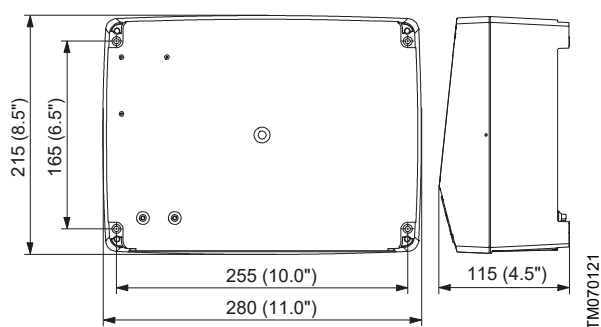
Technical data for LC 231

Inputs and outputs

The following inputs and outputs are available for LC 23X.

- 2 × DIO. Configurable digital input and output
- 2 × DI. Digital input
- 2 × CIO. Configurable input and output
- 1 (2) × configurable relay outputs
- 1 (2) × combined PTC and moisture switch input.

Dimensions



Dimensions of LC 23X

Operating conditions

Ambient temperature	Min. -25 °C (-13 °F) Max. 45 °C (113 °F)
Storage temperature	Min. -30 °C (-22 °F) Max. 60 °C (140 °F)
Altitude	Maximum 2000 m (6562 ft)
Pollution degree	Category 3
Enclosure class	IP54
Mains supply	1 × 110-240 V ± 10 %, PE 3 × 200-250 V ± 10 %, PE 3 × 250-460 V ± 10 %, N, PE
Frequency	50/60 Hz
Motor protection	Software class B Action type 2

Technical data for LC 241

Inputs and outputs

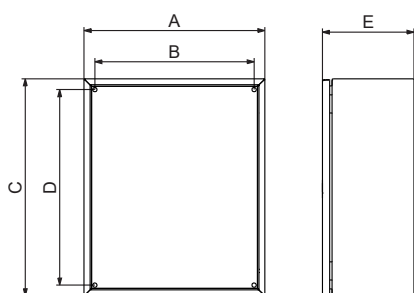
The following inputs and outputs are available:

- 4 × DI. Digital input
- 1 × ADI. Configurable analog or digital input
- 2 × REL. Configurable output relay
- 1 (2) × combined PTC and moisture switch input.

The following inputs and outputs are available for IO 241, if this optional module is included:

- 2 × DIO. Digital input or output
- 2 × DI. Digital input
- 4 × CIO. Configurable input or output
- 2 × REL. Configurable output relay.

Dimensions



TM072025

Type	Dimensions [mm] [inch]				
	A	B	C	D	E
Plastic cabinet	278 (10.9)	254 (10)	378 (14.9)	354 (13.9)	130 (5.12)
Plastic cabinet	278 (10.9)	254 (10)	558 (21.9)	534 (21)	130 (5.12)
Plastic cabinet	378 (14.9)	354 (13.9)	558 (21.9)	534 (21)	180 (7)
Metal cabinet	500 (19.7)	455 (17.9)	600 (23.6)	525 (20.7)	250 (9.8)
Metal cabinet	500 (19.7)	455 (17.9)	700 (27.6)	625 (23.6)	250 (9.8)

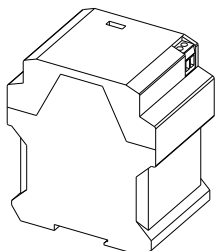
Operating conditions

Ambient temperature, Soft starter	Min. -5 °C (23 °F) Max. 40 °C (104 °F)
Ambient temperature, Direct-on-line	Min. -20 °C (-4 °F) Max. 45 °C (113 °F)
Ambient temperature, Star-delta	Min. -20 °C (-4 °F) Max. 40 °C (104 °F)
Enclosure class	IP54
Mains supply	1 × 230 V ± 10 %, PE 3 × 230/400 V ± 10 %, N, PE 3 × 400 V ± 10 %, PE
Frequency	50/60 Hz
EMC classification	Environment B

Optional equipment for LC 24X

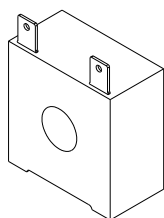
Below optional equipment may be part of standard range or is available as part of FPV and ETO.

Option BB: backup battery



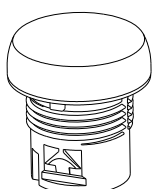
Battery backup to ensure that the CU and IO controller continue to monitor the system when there is no power supply (mains dropout).

Option CT: current transformer



The current transformer is used to measure the current drawn by the motor. The actual current can be seen in Grundfos GO Remote along with the accumulated energy usage. You need one current transformer per pump.

Option D: fault light system



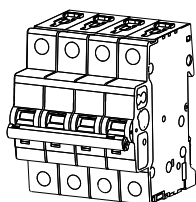
The fault light is on if a fault occurs in the system.

Option E: mains disconnect switch



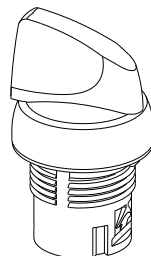
Mains switch to disconnect the power supply.

Option F: circuit breaker per pump



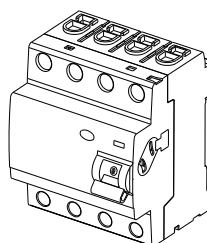
To ensure two different tripping mechanisms: the delayed thermal tripping mechanism for overload protection and the electromechanical tripping mechanism for short-circuit protection.

Option H: ON/OFF/AUTO switch



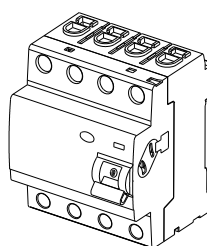
Manual switch to set the product in ON, OFF or AUTO mode.

Option I: RCD per panel



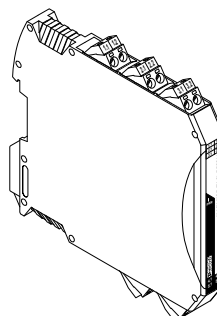
Residual Current Devices (RCDs) for the complete panel to protect people and installations against fault current to earth.

Option J: RCD per pump

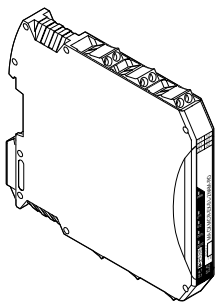


Residual Current Devices (RCDs) for each pump to protect people and installations against fault current to earth.

Option K: Ex barrier, analog

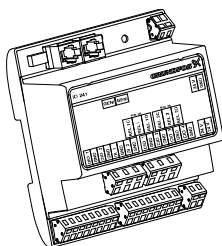


An isolating amplifier for safe operation of proximity sensors and switches installed in the Ex area.

Option L: Ex barrier, digital

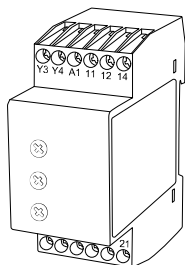
TM072481

An isolating amplifier for safe operation of proximity sensors and switches installed in the Ex area.

Option M: IO 241

TM072268

The IO 241 module is an optional module for gaining extra input and output signals. It can be connected to the Grundfos IO 242 pump module and Grundfos control unit CU 24X.

Option N: DIN-mount electrode relay for two electrodes and REF (CLD4MA2DM24)

TM072792

Conductive level controller for liquids. It has two outputs that can be used as digital signals.

Accessories

Grundfos GO Remote

The product is designed for Bluetooth communication with Grundfos GO Remote.

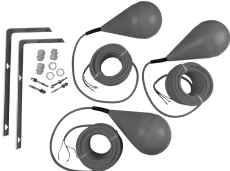
Grundfos GO Remote enables you to set functions and gives you access to status overviews, technical product information and current operating parameters.

Additional accessories

Analog level sensors

Product	Description	Product number
	Level Transmitter, S, 0-3 m c10 m P V BO	99488544
	Level Transmitter, S, 0-5 m c10 m P V BO	99488545
	Level Transmitter, S, 0-5 m c25 m P V BO	99488546
	Level Transmitter 404393 0-5 m c25 m F C BC EX1	99488548
	Level Transmitter, S, 0-10 m c25 m P V BO	99488552
	Level Transmitter, S, 0-2 m c10 m P V BO	99488553
	Level Transmitter, E, 0-50 m c100 m E E BC DWA	99488566
	Level Transmitter, E, 0-5 m c25 m F V BO	99488549
	Level Transmitter, W, 0-5 m c25 m P V BO	99488550
	Level Transmitter, junction box	99488577
	Level Transmitter, cable hanger	99488578

Level switches

Product	Description	Product number
	Level switch MS1, 10 m cable	96003332
	Level switch MS1, 20 m cable	96003695
	Level switch MS1, 30 m cable	91073205
	10 m cable incl. mounting bracket, set of 2 pieces	62500013
	10 m cable incl. mounting bracket, set of 3 pieces	62500014
	10 m cable incl. mounting bracket, set of 4 pieces	62500015
	Weight of 300 g for cable stabilising	96003337

Alarms

Product	Description	Product number
	Signal lamp, 1 × 230 VAC for outdoor mounting	62500020

External main switch

Product	Description	Product number
	For supply cable, 25 A	96002511
	For supply cable, 40 A	96002512

Communication equipment

Product	Description	Product number
	CIM 050	GENIbus 96824631
	CIM 150	PROFIBUS DP 96824793
	CIM 200	Modbus RTU 96824796
	CIM 260	3G/4G 99439302 (EU) 99439306 (US)
	CIM 280	Grundfos Utility Connect 99895383 (EU) 99895386 (US)
	CIM 300	BACnet 96893770
	CIM 500	Modbus TCP
		PROFINET IO
		GRM IP
		BACnet IP
	Antenna 2G/3G/4G	ø111 mm × 46 mm, 1.5 m cable 99518079
	Antenna 2G/3G/4G	ø138 mm × 55 mm, 1.5 m cable, vandal proof 99229807
	Back-up battery for CIM 260/280	99499908

IO extension

Product	Description	Product number
	IO 241 module	99332827

Miscellaneous, for LC 231 only

Product	Description	Product number
	LC EX-BOX 4 × DI	99621732
	LC EX-BOX 1 × AI + 1 × DI	99621731
	LC pneumatic switch box	99734474
	M20 split cable gland kit	99587021
	M25 metal cable gland for 21 mm cable	99587019

Grundfos Product Center

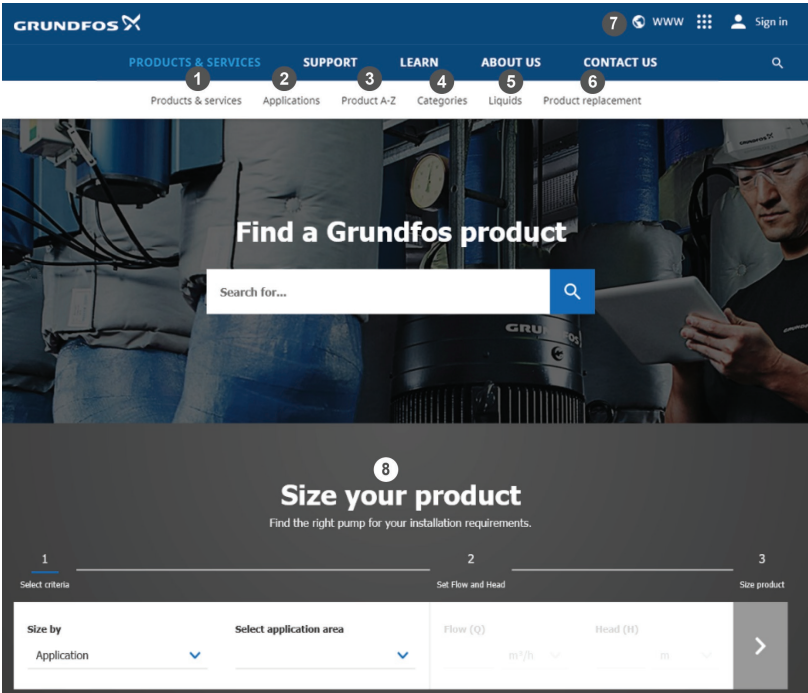
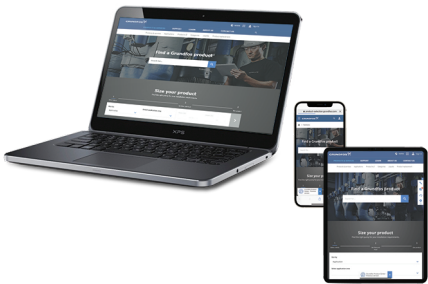
Online search and sizing tool to help you make the right choice.
From the international view, you can select your specific country to view the product range available to you.
International view: <http://product-selection.grundfos.com>

All the information you need in one place

Performance curves, technical specifications, pictures, dimensional drawings, motor curves, wiring diagrams, spare parts, service kits, 3D drawings, documents, system parts. The Product Center displays any recent and saved items - including complete projects - right on the main page.

Downloads

On the product pages, you can download installation and operating instructions, data booklets, service instructions, etc., in PDF format.



When you select your country, you will see the menus below. Note that some menus may not be available depending on the country.

Example: <https://product-selection.grundfos.com/uk>

Pos.	Description
1	Products & services enables you to find products and documents by typing a product number or name into the search field.
2	Applications enables you to choose an application to see how Grundfos can help you design and optimize your system.
3	Products A-Z enables you to look through a list of all the Grundfos products.
4	Categories enables you to look for a product category.
5	Liquids enables you to find pumps designed for aggressive, flammable or other special liquids.
6	Product replacement enables you to find a suitable replacement.
7	WWW enables you to select the country, which changes the language, the available product range and the structure of the website.
8	Sizing enables you to size a product based on your application and operating conditions.

Document quality feedback

To provide feedback about this document, scan the QR-code using your phone's camera or a QR code app.



[Click here to submit your feedback](#)

Argentina

Bombas GRUNDFOS de Argentina S.A.
Ruta Panamericana km. 37.500 Industin
1619 - Garín Pcia. de B.A.
Tel.: +54-3327 414 444
Fax: +54-3327 45 3190

Australia

GRUNDFOS Pumps Pty. Ltd.
P.O. Box 2040
Regency Park
South Australia 5942
Tel.: +61-8-8461-4611
Fax: +61-8-8340-0155

Austria

GRUNDFOS Pumpen Vertrieb Ges.m.b.H.
Grundfosstraße 2
A-5082 Grödig/Salzburg
Tel.: +43-6246-883-0
Fax: +43-6246-883-30

Belgium

N.V. GRUNDFOS Bellux S.A.
Boomsesteenweg 81-83
B-2630 Aartselaar
Tel.: +32-3-870 7300
Fax: +32-3-870 7301

Bosnia and Herzegovina

GRUNDFOS Sarajevo
Zmaja od Bosne 7-7A
BiH-71000 Sarajevo
Tel.: +387 33 592 480
Fax: +387 33 590 465
www.ba.grundfos.com
E-mail: grundfos@bih.net.ba

Brazil

BOMBAS GRUNDFOS DO BRASIL
Av. Humberto de Alencar Castelo Branco,
630
CEP 09850 - 300
São Bernardo do Campo - SP
Tel.: +55-11 4393 5533
Fax: +55-11 4343 5015

Bulgaria

Grundfos Bulgaria EOOD
Slatina District
Iztocna Tangenta street no. 100
BG - 1592 Sofia
Tel.: +359 2 49 22 200
Fax: +359 2 49 22 201
E-mail: bulgaria@grundfos.bg

Canada

GRUNDFOS Canada inc.
2941 Brighton Road
Oakville, Ontario
L6H 6C9
Tel.: +1-905 829 9533
Fax: +1-905 829 9512

China

GRUNDFOS Pumps (Shanghai) Co. Ltd.
10F The Hub, No. 33 Suhong Road
Minhang District
Shanghai 201106 PRC
Tel.: +86 21 612 252 22
Fax: +86 21 612 253 33

Colombia

GRUNDFOS Colombia S.A.S.
Km 1.5 vía Siberia-Cota Conj. Potrero
Chico,
Parque Empresarial Arcos de Cota Bod.
1A.
Cota, Cundinamarca
Tel.: +57(1)-2913444
Fax: +57(1)-8764586

Croatia

GRUNDFOS CROATIA d.o.o.
Buzinski prilaz 38, Buzin
HR-10010 Zagreb
Tel.: +385 1 6595 400
Fax: +385 1 6595 499
www.hr.grundfos.com

Czech Republic

GRUNDFOS Sales Czechia and Slovakia
s.r.o.
Čajkovského 21
779 00 Olomouc
Tel.: +420-585-716 111

Denmark

GRUNDFOS DK A/S
Martin Bachs Vej 3
DK-8850 Bjerringbro
Tel.: +45-87 50 50 50
Fax: +45-87 50 51 51
E-mail: info_GDK@grundfos.com
www.grundfos.com/DK

Estonia

GRUNDFOS Pumps Eesti OÜ
Peterburi tee 92G
11415 Tallinn
Tel.: + 372 606 1690
Fax: + 372 606 1691

Finland

OY GRUNDFOS Pumput AB
Trukkikuja 1
FI-01360 Vantaa
Tel.: +358-(0) 207 889 500

France

Pompes GRUNDFOS Distribution S.A.
Parc d'Activités de Chesnes
57, rue de Malacombe
F-38290 St. Quentin Fallavier (Lyon)
Tel.: +33-4 74 82 15 15
Fax: +33-4 74 94 10 51

Germany

GRUNDFOS GMBH
Schlüterstr. 33
40699 Erkrath
Tel.: +49-(0) 211 929 69-0
Fax: +49-(0) 211 929 69-3799
E-mail: infoservice@grundfos.de
Service in Deutschland:
kundendienst@grundfos.de

Greece

GRUNDFOS Hellas A.E.B.E.
20th km. Athinon-Markopoulou Av.
P.O. Box 71
GR-19002 Peania
Tel.: +0030-210-66 83 400
Fax: +0030-210-66 46 273

Hong Kong

GRUNDFOS Pumps (Hong Kong) Ltd.
Unit 1, Ground floor, Siu Wai Industrial
Centre
29-33 Wing Hong Street & 68 King Lam
Street, Cheung Sha Wan
Kowloon
Tel.: +852-27861706 / 27861741
Fax: +852-27858664

Hungary

GRUNDFOS South East Europe Kft.
Tópark u. 8
H-2045 Törökbálint
Tel.: +36-23 511 110
Fax: +36-23 511 111

India

GRUNDFOS Pumps India Private Limited
118 Old Mahabalipuram Road
Thoraiakkam
Chennai 600 097
Tel.: +91-44 2496 6800

Indonesia

PT GRUNDFOS Pompa
Graha intirub Lt. 2 & 3
Jln. Cililitan Besar No.454. Makasar,
Jakarta Timur
ID-Jakarta 13650
Tel.: +62 21-469-51900
Fax: +62 21-460 6910 / 460 6901

Ireland

GRUNDFOS (Ireland) Ltd.
Unit A, Merrywell Business Park
Ballymount Road Lower
Dublin 12
Tel.: +353-1-4089 800
Fax: +353-1-4089 830

Italy

GRUNDFOS Pompe Italia S.r.l.
Via Gran Sasso 4
I-20060 Truccazzano (Milano)
Tel.: +39-02-95838112
Fax: +39-02-95309290 / 95838461

Japan

GRUNDFOS Pumps K.K.
1-2-3, Shin-Miyakoda, Kita-ku
Hamamatsu
431-2103 Japan
Tel.: +81 53 428 4760
Fax: +81 53 428 5005

Kazakhstan

Grundfos Kazakhstan LLP
7' Kyz-Zhibek Str., Kok-Tobe micr.
KZ-050020 Almaty Kazakhstan
Tel.: +7 (727) 227-98-55/56

Korea

GRUNDFOS Pumps Korea Ltd.
6th Floor, Aju Building 679-5
Yeoksam-dong, Kangnam-ku, 135-916
Seoul, Korea
Tel.: +82-2-5317 600
Fax: +82-2-5633 725

Latvia

SIA GRUNDFOS Pumps Latvia
Deglava biznesa centrs
Augusta Deglava ielā 60
LV-1035, Rīga,
Tel.: + 371 714 9640, 7 149 641
Fax: + 371 914 9646

Lithuania

GRUNDFOS Pumps UAB
Smolensko g. 6
LT-03201 Vilnius
Tel.: + 370 52 395 430
Fax: + 370 52 395 431

Malaysia

GRUNDFOS Pumps Sdn. Bhd.
7 Jalan Peguam U1/25
Glenmarie industrial Park
40150 Shah Alam, Selangor
Tel.: +60-3-5569 2922
Fax: +60-3-5569 2866

Mexico

Bombas GRUNDFOS de México
S.A. de C.V.
Boulevard TLC No. 15
Parque industrial Stiva Aeropuerto
Apodaca, N.L. 66600
Tel.: +52-81-8144 4000
Fax: +52-81-8144 4010

Netherlands

GRUNDFOS Netherlands
Veluwezoom 35
1326 AE Almere
Postbus 22015
1302 CA ALMERE
Tel.: +31-88-478 6336
Fax: +31-88-478 6332
E-mail: info_gnl@grundfos.com

New Zealand

GRUNDFOS Pumps NZ Ltd.
17 Beatrice Tinsley Crescent
North Harbour Industrial Estate
Albany, Auckland
Tel.: +64-9-415 3240
Fax: +64-9-415 3250

Norway

GRUNDFOS Pumper A/S
Strømsveien 344
Postboks 235, Leirdal
N-1011 Oslo
Tel.: +47-22 90 47 00
Fax: +47-22 32 21 50

Poland

GRUNDFOS Pompy Sp. z o.o.
ul. Klonowa 23
Baranowo k. Poznania
PL-62-081 Przeźmierowo
Tel.: (+48-61) 650 13 00
Fax: (+48-61) 650 13 50

Portugal

Bombas GRUNDFOS Portugal, S.A.
Rua Calvet de Magalhães, 241
Apartado 1079
P-2770-153 Paço de Arcos
Tel.: +351-21-440 76 00
Fax: +351-21-440 76 90

Romania

GRUNDFOS Pompe România SRL
S-PARK BUSINESS CENTER, Clădirea
A2, etaj 2
Str. Tipografilor, Nr. 11-15, Sector 1, Cod
013714
Bucuresti, Romania
Tel.: 004 021 2004 100
E-mail: romania@grundfos.ro

Serbia

Grundfos Srbija d.o.o.
Omladinskih brigada 90b
11070 Novi Beograd
Tel.: +381 11 2258 740
Fax: +381 11 2281 769
www.rs.grundfos.com

Singapore

GRUNDFOS (Singapore) Pte. Ltd.
25 Jalan Tukang
Singapore 619264
Tel.: +65-6681 9688
Fax: +65-6681 9689

Slovakia

GRUNDFOS s.r.o.
Prievozská 4D 821 09 BRATISLAVA
Tel.: +421 2 5020 1426
sk.grundfos.com

Slovenia

GRUNDFOS LJUBLJANA, d.o.o.
Leskoškova 9e, 1122 Ljubljana
Tel.: +386 (0) 1 568 06 10
Fax: +386 (0) 1 568 06 19
E-mail: tehnika-si@grundfos.com

South Africa

GRUNDFOS (PTY) LTD
16 Lascelles Drive, Meadowbrook Estate
1609 Germiston, Johannesburg
Tel.: (+27) 10 248 6000
Fax: (+27) 10 248 6002
E-mail: lgradidge@grundfos.com

Spain

Bombas GRUNDFOS España S.A.
Camino de la Fuentecilla, s/n
E-28110 Algete (Madrid)
Tel.: +34-91-848 8800
Fax: +34-91-628 0465

Sweden

GRUNDFOS AB
Box 333 (Lunnagårdsgatan 6)
431 24 Mölndal
Tel.: +46 31 332 23 000
Fax: +46 31 331 94 60

Switzerland

GRUNDFOS Pumpen AG
Bruggacherstrasse 10
CH-8117 Fällanden/ZH
Tel.: +41-44-806 8111
Fax: +41-44-806 8115

Taiwan

GRUNDFOS Pumps (Taiwan) Ltd.
7 Floor, 219 Min-Chuan Road
Taichung, Taiwan, R.O.C.
Tel.: +886-4-2305 0868
Fax: +886-4-2305 0878

Thailand

GRUNDFOS (Thailand) Ltd.
92 Chaloom Phrakiat Rama 9 Road
Dokmai, Pravej, Bangkok 10250
Tel.: +66-2-725 8999
Fax: +66-2-725 8998

Turkey

GRUNDFOS POMPA San. ve Tic. Ltd. Sti.
Gebze Organize Sanayi Bölgesi
İhsan dede Caddesi
2. yol 200. Sokak No. 204
41490 Gebze/ Kocaeli
Tel.: +90 - 262-679 7979
Fax: +90 - 262-679 7905
E-mail: satis@grundfos.com

Ukraine

ТОВ "ГРУНДФОС УКРАЇНА"
Бізнес Центр Європа
Столичне шосе, 103
м. Київ, 03131, Україна
Tel.: (+38 044) 237 04 00
Fax: (+38 044) 237 04 01
E-mail: ukraine@grundfos.com

United Arab Emirates

GRUNDFOS Gulf Distribution
P.O. Box 16768
Jebel Ali Free Zone, Dubai
Tel.: +971 4 8815 136
Fax: +971 4 8815 136

United Kingdom

GRUNDFOS Pumps Ltd.
Grovebury Road
Leighton Buzzard/Beds. LU7 4TL
Tel.: +44-1525-850000
Fax: +44-1525-850011

U.S.A.

Global Headquarters for WU
856 Koomey Road
Brookshire, Texas 77423 USA
Phone: +1-630-236-5500

Uzbekistan

Grundfos Tashkent, Uzbekistan
The Representative Office of Grundfos
Kazakhstan in Uzbekistan
38a, Oybek street, Tashkent
Tel.: (+998) 71 150 3290 / 71 150 3291
Fax: (+998) 71 150 3292

99592907

ECM: 1444947	02.2026
--------------	---------

Grundfos Holding A/S
Poul Due Jensens Vej 7
DK-8850 Bjerringbro
Tel: +45 87 50 14 00
www.grundfos.com

GRUNDFOS 